

COVER PAGE FOR POSTING ON GRANTS.GOV WEBSITE

RESEARCH TO DEVELOP, ADAPT OR COMPARE TECHNOLOGIES TO DETECT LIVE VIRUSES AND OTHER ENTERIC PATHOGENS IN LARGE VOLUMES OF WATER

General Information

Announcement Type:	Initial Announcement
Funding Instrument Type:	CA
Funding Opportunity Number:	EPA-ORD-07-26210
Posted Date:	October 19, 2006
Original Due Date for Applications:	To be considered timely, printed hard-copy applications must be received by 4:30 p.m. local time in Cincinnati, OH on December 5, 2006 from the U.S. Postal Service or other commercial delivery service. Applications submitted electronically through grants.gov must be received by grants.gov by 4:30 p.m. EST on December 5, 2006.
Current Due Date for Applications:	To be considered timely, applications must be received by 4:30 p.m. local time in Cincinnati, OH on December 5, 2006 from the U.S. Postal Service or other commercial delivery service. Applications submitted electronically through grants.gov must be received by grants.gov by 4:30 p.m. EST on December 5, 2006.
Category of Funding Activity:	Environment
Anticipated Number of Awards:	1
Anticipated Total Program Funding:	\$ 400,000
Award Ceiling:	\$ 400,000
Award Floor:	\$200,000
CFDA Number:	66.511
Cost Sharing or Matching Requirement:	None
Geospatial Information	It is anticipated that the agreement that is awarded will not involve or relate to geospatial information.

Eligible Applicants

Programs under CFDA 66.511 are available to each State, territory and possession, and Tribal nation of the United States, including the District of Columbia, for public and private State universities and colleges, hospitals, laboratories, State and local government departments, and other public or private nonprofit institutions and in some cases, individuals who have demonstrated unusually high scientific ability. Profit-making firms are not eligible to receive awards. Eligible nonprofit organizations

include any organizations that meet the definition of nonprofit in OMB Circular A-122. However, nonprofit organizations described in Section 501(c)(4) of the Internal Revenue Code that engage in lobbying activities as defined in Section 3 of the Lobbying Disclosure Act of 1995 are not eligible to apply. Universities and educational institutions must be subject to OMB Circular A-21.

Federal Agency Name

U.S. Environmental Protection Agency, Office of Research and Development, National Exposure Research Laboratory, Microbiological and Chemical Exposure Assessment Research Division
Attn: Linda Ransick (MS-587), 26 W. Martin Luther King Drive, Cincinnati, OH 45268

Description

The purpose of the RFA is to stimulate the development of a new or improved method for detecting viruses (or other enteric pathogens) by genus from source and drinking water that is less expensive than the current methods used by health officials.

Application Materials

You may submit either a printed application or an electronic application (but not both) for this announcement. The printed application must be submitted to Linda Ransick (MS-587), 26 W. Martin Luther King Drive, Cincinnati, OH 45268, by the closing date and time. To apply electronically, the electronic application package available through the <http://www.grants.gov/> web site must be used. If your organization is not currently registered with Grants.gov, you need to allow approximately one week to complete the registration process. This registration, and electronic submission of your application, must be performed by an appropriate representative of your organization.

Agency Contact Person for Electronic Access Problem

Walter Stutts, phone: (513) 569-7487 email: stutts.walter@epa.gov

Link to Full Announcement

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FULL TEXT OF ANNOUNCEMENT

I. Funding Opportunity Description

Title of Assistance Opportunity: “RESEARCH TO DEVELOP, ADAPT, OR COMPARE TECHNOLOGIES TO DETECT LIVE VIRUSES AND OTHER ENTERIC PATHOGENS IN LARGE VOLUMES OF WATER”

Background: The concentration of infectious viruses in water can vary widely, depending on the source of the water being evaluated. For instance, contaminated wastewater may contain high levels of viral pathogens, while conventionally treated drinking water may contain few or no infectious organisms. In most cases, to obtain statistically meaningful data on the presence of viruses and other pathogens in water, it is necessary to evaluate a large volume of water because the concentration of any individual pathogen is likely to be low. The size of the volume to be evaluated depends upon the matrix; currently viruses are concentrated from approximately 200 L of surface water or ≥ 1000 L of drinking water before they are evaluated using molecular or cultural detection assays. The most established method to do this requires the use of the Virosorb™ 1MDS filter, which is expensive ($> \$150$ per filter) and has variable levels of recovery, depending on the virus and water matrix. Because of these issues, frequent testing of environmental water for these pathogens is not feasible. Currently, there are a number of alternatives to the 1MDS filter that are less expensive but data on the effectiveness of these approaches are limited. Examples of alternative approaches include: glass wool filters, functionalized silica beads, microfluidic systems, nano alumina fiber-based filters, and ultrafiltration methods.

The National Exposure Research Laboratory (NERL) of the U.S. EPA’s Office of Research and Development will consider funding one or more research proposals to develop a new or improved method for detecting viruses by genus from source and drinking water that is less expensive than the current methods used by health officials. Such a research proposal could consist of the development and evaluation of a less expensive component of an existing method, such as an improved sample collection and concentration procedure, or, alternatively, could be a whole new approach to accurately detect and quantify viruses in large volumes of water, for instance the use of a technology that does not require a sample concentration step. Applications may propose to develop and evaluate a new method/technology or they may outline a means to improve the effectiveness of existing technologies such as the Virosorb™ 1 MDS filter. In any case, a range of enteric viruses, including all of the CCL viruses, in representative surface, ground and drinking waters should be used to test the proposed method(s) and determine the percent recovery. In order for the proposed method(s) to be applicable to field sampling, it is believed that the testing should use virus spikes that are ≤ 500 PFU or 5000 PCR detectable units per sample.

If a proposal is made to develop and/or evaluate a means to concentrate viruses, the most desirable method(s) would have most or all of the following features. It should be able to capture virus from > 1000 L of drinking water in less than five hours and/or from 200 L of surface water in less than one hour. In addition, the final concentrated sample should have a volume of 50 ml or less and should be suitable for downstream assays such as PCR and cell culture; in particular, the procedure to concentrate the sample should not result in the inactivation of infectious virus particles. Furthermore,

the filters or apparatus used may be designed to be either disposable or reusable after appropriate treatment procedures that eradicate both live virus and nucleic acids between uses. Of secondary interest would be the evaluation of this technology for use with other classes of microorganisms such as enteric protozoa and bacteria. The use of modular approaches (e.g., continuous centrifugation for protozoa and bacteria and filtration of the flow-through supernatant for viruses, etc.) that lead to improved recovery of pathogens will be considered.

If a proposal is made to develop a whole new approach to detecting viable viruses by genus, such a method should be able to screen equivalent volumes of water (200 L of surface water and >1000 L of drinking water).

Funding Priorities/Focus:

The purpose of this Request for Application (RFA) is to solicit proposals for a cooperative agreement to develop a new or improved method for detecting viruses by genus from source drinking water that is less expensive than the current methods used by health officials. Whatever approach is proposed should focus on achieving the following goals listed in descending order of priority:

1. Develop a method to detect CCL viruses in 1000 L of drinking water or 200 L of surface water. This could be done by concentrating the viruses to 50 ml or less or by screening the water sample for viruses using a method that does not require concentration.
2. Develop a method that is less costly than those currently in use in order to promote more frequent use by health officials.
3. Develop a method that will equal or exceed the percent recovery of infectious virus particles of the methods currently in use.
4. Determine the impact of this technology on pathogen detectability with molecular methods.
5. Develop a method that might be adopted for use in detecting other types of pathogens.

Environmental Results: This RFA seeks applications that will advance the following goals/objectives as identified in EPA's Strategic Plan (<http://www.epa.gov/ocfo/plan/2003sp.pdf>):

Goal: 2 – Clean and Safe Water
Objective: 2.3 - Enhance Science and Research
Sub-objective: 2.3.2 - Conduct Leading-Edge Research

Anticipated environmental outputs would include a new or improved method for detecting waterborne viruses which would be described in one or more peer-reviewed journal articles. The anticipated outcome would be an increase in the frequency of monitoring and in the determination of the level and type of viruses found in a variety of water matrices. This in turn would enable health officials to more effectively monitor the safety of drinking and possibly recreational water.

Statutory Authority for Award of Assistance: This research is authorized under the Safe Drinking Water Act (Sect. 42 U.S.C. 300f-300j-26), which authorizes the EPA to promote research relating to drinking water contaminants that may threaten human health.

Geospatial Information: It is anticipated that the agreement that is awarded will not involve or relate to geospatial information.

II. Award Information

Anticipated Amount of Individual Award: \$400,000

Anticipated Number of Awards: One, though the Agency reserves the right to make more than one award if more than one proposal is determined to be exceptional and funds are available.

Anticipated Funding: The EPA anticipates funding this award over a period of 2 years. Funding of the first year of the award is anticipated to be \$200,000. Additional funding of \$200,000 during the subsequent year will be contingent upon availability of funds and satisfactory progress by the selected recipient.

Anticipated Project Period: 5/01/07-04/30/09

Supplemental Applications: Applications for supplemental awards of existing EPA assistance agreements will not be eligible to compete for this assistance opportunity.

Type of Award: The Agency anticipates the award of a cooperative agreement.

Anticipated Federal Involvement: EPA and the Project Officer for this assistance agreement anticipate substantial involvement in the implementation of the research as follows:

1. Provide technical input and guidance during the development and testing of the method(s).
2. Coordinate extramural research with relevant EPA in-house laboratory activities;
3. Participate in the development and preparation of journal articles on these activities.

III. Eligibility Information

Eligible Applicants: Programs under CFDA 66.511 are available to each State, territory and possession, and Tribal nation of the United States, including the District of Columbia, for public and private State universities and colleges, hospitals, laboratories, State and local government departments, and other public or private nonprofit institutions and in some cases, individuals who have demonstrated unusually high scientific ability. Profit-making firms are not eligible to receive awards. Eligible nonprofit organizations include any organizations that meet the definition of nonprofit in OMB Circular A-122. However, nonprofit organizations described in Section 501(c)(4) of the Internal Revenue Code that engage in lobbying activities as defined in Section 3 of the Lobbying Disclosure Act of 1995 are not eligible to apply. Universities and educational institutions must be subject to OMB Circular A-21.

Cost Sharing Requirements: Institutional cost-sharing is not required. However, if the applicant

intends to cost-share, a brief statement concerning cost-sharing should be added to the budget justification, and estimated dollar amounts must be included in the appropriate categories in the budget table.

Other Threshold Eligibility Criteria:

Administrative Eligibility Criteria: Applications must substantially comply with the application submission instructions and requirements set forth in Section IV of this announcement or else they will be rejected. In addition, where a page limit is expressed in Section IV with respect to the application and/or parts of the application, pages in excess of the page limitation will not be reviewed. Applications must be received by the EPA or through www.grants.gov on or before the solicitation closing date published in Section IV of this announcement. Applications received after the published closing date will be returned to the sender without further consideration.

Relevance Eligibility Criteria: Proposals that are found administratively acceptable will be subjected to a review for relevancy to EPA's mission to support advancement of environmental science. Proposals will be rejected if they are found to lack relevance. Examples of proposals that lack relevance include:

1. Proposal is deficient technically with no chance for consideration.
2. Proposal fails to advance the objectives stated in the solicitation even if successfully performed.
3. Proposal essentially duplicates research already completed or underway.
4. Proposal fails to demonstrate a public purpose of support and stimulation; i.e., it implies the primary purpose is to provide direct support to the Federal government.

Applications will be reviewed for threshold eligibility purposes prior to initiation of the technical and programmatic reviews under Section V. Proposals from ineligible applicants or proposals that do not meet the eligibility criteria set forth above will be returned without further review within 15 calendar days of the date of the ineligibility determination.

IV. Application and Submission Information

Applicants must submit a complete, detailed application to include all of the documents described in Section A below regardless of the mode of transmission. Additional guidance on completing the documents is available at EPA's Office of Grants and Debarment (<http://www.epa.gov/ogd/>). Applicants may submit either a hard-copy printed application or an electronic application through grants.gov (but not both) for this announcement. Applications may not be submitted via email. Instructions for both forms of submission follow.

A. Application Materials

The application is made through submission of the materials described below. ***It is essential that the application contain all information requested and be submitted in the formats described.*** The application must contain the following items:

I. Application For Federal Assistance (SF-424). This form will be the *first page* of the application. Instructions for completion of the SF-424 are included with the form. The form must contain the original signature of an authorized representative of the applying institution. Please note that both the Principal Investigator and an administrative contact are to be identified in Section 5 of the SF424. The applicant's DUNS number must be included.

II. Budget Information for Non-Construction Programs (SF-424A) At a minimum, complete Section B- Budget Information and Section F-Other Budget Information.

III. Key Contact List. EPA Key Contacts Form 5700-54 should include the Principal, Co-Investigators, and administrative contacts. A copy of this form should also be completed for major sub-agreements (contacts at the institutions of primary co-investigators).

IV. Project Narrative and Supporting Documentation

1. The project narrative is the technical proposal that discusses the technical approach and organizational capabilities for accomplishing the goals stated under the Funding Priorities/Focus in Section I. Research methods must be clearly stated so that reviewers can evaluate the appropriateness of your approach. The narrative must identify the anticipated environmental outputs and associated outcomes, and include a plan for tracking and measuring the success in achieving same. Key personnel should be identified with their roles and commitment to the project described. Include a description of the facilities and equipment that will be available. **In developing the technical proposal, the applicant should focus on the Technical Evaluation Criteria set forth in Section V and structure the proposal to address each of the first three criteria in the order listed. The fourth Technical Evaluation Criterion will evaluate the Quality Management Plan which will be a separate document included in the application.**

The project narrative, including those submitted electronically, must be submitted in English and must not exceed twenty (20) consecutively numbered (bottom center) 8.5X11-inch pages of single-spaced, standard 12-point type with 1-inch margins. This page limitation shall include all text, tables, figures, references, attachments, and appendices.

2. The Quality Management Plan must describe the quality system in terms of management and organizational structure, policy and procedures, personnel qualifications and training; procurement of items and services; documentation and records; computer hardware and software; planning; implementation of work processes; assessment and response; and quality improvement. Thus, the Quality Management Plan may be viewed as the "umbrella" document under which individual projects are conducted. The Quality Management Plan is used to demonstrate conformance to Part A requirements of ANSI/ASQC E4-1994. The Quality Management Plan must be approved and signed by the senior management of the organization. For more information, go to <http://www.epa.gov/quality>.

3. A demonstration of the applicant's programmatic capability (separate from the Project Narrative) to successfully complete the proposed project. Applicants should at a minimum submit a

list of projects of similar size, scope and relevance to the proposed project that the applicant has undertaken in the past five years under assistance agreements awarded by Federal and/or non-federal agencies. Include the title, the Principal Investigator, the total amount funded, the project period, a brief (1-3 lines) description of the project, and the record of resulting peer reviewed publications. Provide a point of contact in the primary sponsor's organization with email address and telephone. The information provided will be used by the Agency in conjunction with other readily available information to evaluate the applicant's past performance. The Agency, as a part of the evaluation process, may contact the referenced sponsor to obtain more detailed information of the applicant's recent past performance in completing projects of similar size, scope and relevance.

4. Budget Narrative includes detailed, itemized budget estimates for the project that is broken down into direct labor, fringe benefits, equipment, travel, other direct costs and overhead with summaries for each year and the total for the entire project. If a sub-agreement is included in the application, provide a separate budget for the sub-agreement in the same format if the sub-agreement is greater than \$25k.

If amounts are budgeted for subcontracts, provide a description of the work that will be subcontracted and an explanation of why it must be subcontracted. Indicate whether the subcontracts will be awarded competitively or if not, what justification exists to make a non-competitive award. Any budget that includes amounts for subcontracts of 40% or more of the total direct costs will be subject to special review. Refer to Section IV.F, Coalitions, for a further discussion of proposed subcontracts.

Please note that institutional cost-sharing is not required. However, if you intend to cost-share, a brief statement concerning cost-sharing should be added to the budget justification, and estimated dollar amounts must be included in the appropriate categories in the budget table.

Describe the basis for calculating the personnel, fringe benefits, travel, equipment, supplies, contractual support, and other costs identified in the itemized budget and explain the basis for their calculation. (Special attention should be given to explaining the "travel," "equipment," and "other" categories.). For any proposed equipment, identify any tangible non-expendable personal property to be purchased which has an estimated cost of \$5,000 or more per unit and a useful life of more than one year. (Personal property items with a unit cost of less than \$5,000 are considered supplies.) Tips for preparing the budget support can be found at <http://www.epa.gov/ogd/recipient/tips.htm>.

5. Biographical Sketches - 2-page curriculum vitae should be included for the Principal Investigator and any other key personnel identified in the proposal.

B. Submission Instructions for Electronic Applications

The electronic submission of your application must be made by an official representative of your institution who is registered with Grants.gov. For more information, go to <http://www.grants.gov> and click on "Get Registered" on the left side of the page. *Note that the registration process may take a week or longer to complete.* If your organization is not currently registered with Grants.gov, please encourage your office to designate an AOR and ask that individual to begin the registration process

as soon as possible.

To begin the application process under this grant announcement, go to <http://www.grants.gov> and click on “Apply for Grants” on the left side of the page. Then click on “Apply Step 1: Download a Grant Application Package and Instructions” to download the PureEdge viewer and obtain the application package. You may retrieve the application package by entering the Funding Opportunity Number, EPA-ORD-07-26210, or the appropriate CFDA number (CFDA 66.511), in the space provided. Then complete and submit the application package as indicated. You may also be able to access the application package by clicking on the button “How To Apply” at the top right of the synopsis page for this announcement on <http://www.grants.gov> (to find the synopsis page, go to <http://www.grants.gov> and click on the “Find Grant Opportunities” button on the left side of the page and then go to Search Opportunities/Browse by Agency and then go to EPA opportunities).

Application Submission Deadline: Your organization’s AOR must submit your complete application electronically to EPA through Grants.gov (<http://www.grants.gov>) no later than 4:30 pm EST on December 5, 2006

Documents I through IV listed under Application Materials in Section IV.A of this announcement should appear in the “mandatory Documents” box on the grants.gov Grant Application Package page.

For documents I, II, and III, click on the appropriate form and then click “Open Form” below the box. The fields that must be completed will be highlighted in yellow. Optional fields and completed fields will be displayed in white. If you enter an invalid response or incomplete information in a field, you will receive an error message. When you have finished filling out each form, click “Save”. When you return to the electronic Grant Application Package page, click on the form you just completed, and then click on the box that says, “Move Form to Submission List”. This action will move the document over to the box that says, “Mandatory Completed Documents for Submission.”

For document IV, you will need to attach electronic files. Prepare each of the documents as described above in items IV.1 through IV.5 of Section IV.A and save the documents to your computer as an MS Word, PDF or WordPerfect file. When you are ready to attach your proposal to the application package, click on “Project Narrative Attachment Form”, and open the form. Click “Add Mandatory Project Narrative File”, and then attach your proposal (previously saved to your computer) using the browse window that appears. You may then click “View Mandatory Project Narrative File” to view it. Enter a brief descriptive title of your project in the space beside “Mandatory Project Narrative File Filename”, the filename should be no more than 40 characters long. If there are other attachments that you would like to submit to accompany your proposal, you may click “Add Optional Project Narrative File” and proceed as before. When you have finished attaching the necessary documents, click “Close Form”. When you return to the “Grant Application Package” page, select “Project Narrative Attachment Form” and click “Move Form to Submission List”. The form should now appear in the box that says, “Mandatory Completed Documents for Submission”.

Once you have finished filling out all of the forms/attachments and they appear in one of the “Completed Documents for Submission” boxes, click the “Save” button that appears at the top of the Web page. It is suggested that you save the document a second time, using a different name, since this will make it easier to submit an amended package later if necessary. Please use the following format when saving your file: “Applicant Name – FY 06 (grant category; e.g., Assoc Prog Supp) – 1st Submission” or “Applicant Name – FY 07 (grant category) – Back-up Submission.” If it becomes necessary to submit an amended package at a later date, then the name of the 2nd submission should be changed to “Applicant Name – FY 07 (grant category) – 2nd Submission.”

Once your application package has been completed and saved, send it to your AOR for submission to the U.S. EPA through Grants.gov. Please advise your AOR to close all other software programs before attempting to submit the application package through Grants.gov.

In the “Application Filing Name” box, your AOR should enter your organization’s name (abbreviate where possible), the fiscal year (e.g., FY07), and the grant category (e.g., Assoc Prog Supp). The filing name should not exceed 40 characters. From the “Grant Application Package” page, your AOR may submit the application package by clicking the “Submit” button that appears at the top of the page. The AOR will then be asked to verify the agency and funding opportunity number for which the application package is being submitted. If problems are encountered during the submission process, the AOR should reboot his/her computer before trying to submit the application package again. [It may be necessary to turn off the computer (not just restart it) before attempting to submit the package again.] If the AOR continues to experience submission problems, he/she should contact grants.gov for assistance (Phone: 1-800-518-4726, Email: support@grants.gov). If submission problems are not quickly resolved, contact the NERL electronic submission support person, Walt Stutts at 513/569-7487 or stutts.walter@epa.gov.

Application packages submitted through grants.gov will be time/date stamped electronically.

C. Submission Instructions for Printed Hard-Copy Applications

Submit a complete application including all of the documents identified in Section IV.A of this announcement. The complete application *must be* sent through regular mail, express mail, or a major courier to: **Linda Ransick (MS-587), U.S. EPA, 26 West Martin Luther King Dr., Cincinnati, OH 45268.**

Because of security concerns, applications cannot be personally delivered. To be considered timely, **printed applications must be received by 4:30 p.m. local time** in Cincinnati, OH on December 5, 2006 from the U.S. Postal Service or a major courier. Applications received after the deadline will not be considered and will be returned to the submitter. Printed hard-copy applications, including all documents stated in Section IV.A.above, must be submitted in the original with 3 copies and should be double-sided. Grant application forms can be found at <http://www.epa.gov/ogd/AppKit/application.htm>

D. Intergovernmental Review

This assistance opportunity is subject to Executive Order 12372, "Intergovernmental Review of Federal Programs." Applicants should contact their State's Single Point of Contact (SPOC) to find out how to comply with the State's process. The names and addresses of the SPOC's are listed in the Office of Management and Budget's home page at: <http://www.whitehouse.gov/omb/grants/spoc.html>.

E. Funding Restrictions

Funding of the first year of the award is expected to be at \$200,000 for the first budget period of one year. Additional funding of \$200,000 will be contingent upon availability of funds and satisfactory performance during the first one-year budget period.

F. Coalitions

Groups of two or more eligible applicants may choose to form a coalition and submit a single application for this assistance agreement. Coalitions must identify which eligible organization will be the recipient of the assistance agreement, and which eligible organizations(s) will be subawardees of the recipient. Sub-awards must be consistent with the definition of that term in 40 CFR 30.2(ff). The recipient must administer the assistance agreement, is accountable to EPA for proper expenditure of the funds, and will be the point of contact for the coalition. As provided in 40 CFR 30.2(gg), sub-recipients are accountable to the recipient for proper use of EPA funding.

Coalitions may not include for-profit organizations that will provide services or products to the successful applicant. For-profit organizations are not eligible for sub-awards. Any contracts for services or products funded with EPA financial assistance must be awarded under the competitive procurement procedures of 40 CFR Part 30. The regulations also contain limitations on consultant compensation. Applicants are not required to identify contractors or consultants in the proposal. Moreover, the fact a successful applicant has named a specific contractor or consultant in the proposal EPA approves does not relieve it of its obligations to comply with competitive procurement requirements or consultant compensation limitations.

G. Amendments

Amendments will be posted on grants.gov under this Funding Opportunity Number and the due date for applications will be extended if deemed appropriate.

H. Confidentiality

By submitting an application in response to this solicitation, the applicant grants the EPA

permission to make limited disclosures of the application to technical reviewers both within and outside the Agency for the express purpose of assisting the Agency with evaluating the application. Information from a pending or unsuccessful application will be kept confidential to the fullest extent allowed under law; information from a successful application may be publicly disclosed to the extent permitted by law.

In accordance with 40 CFR 2.203, applicants may claim all or a portion of the application/proposal as confidential business information (for example, hypotheses or methodologies contained in the research narrative that the applicant wishes to protect from possible public disclosure). EPA will evaluate confidentiality claims in accordance with 40 CFR Part 2. Applicants must clearly mark applications/proposals or portions of applications/proposals they claim as confidential. If no claim of confidentiality is made, the EPA is not required to make an inquiry to the applicant otherwise required by 40 CFR 2.204(c)(2) prior to disclosure.

V. Application Review Information

Each application that meets the eligibility requirements set forth in Section III will be subjected to technical and programmatic reviews. The technical review will be conducted by a panel consisting of at least two non-EPA reviewers and one EPA reviewer who are able to demonstrate expertise and a lack of any conflict of interest. The purpose is to evaluate the scientific merit of the proposal and the capability of the applicant to complete the project as proposed. The programmatic review will be conducted by other qualified EPA personnel who are able to demonstrate a lack of any conflict of interest. The purpose is to evaluate the applicant's past performance in conducting projects of similar size, scope and relevance. The following criteria will be used in the evaluation process:

Technical Evaluation Criteria

1. Adequacy of Technical Approach

- a. The activities that are proposed to address the RFA focus identified in Section 1. (45%)
 - i. Background and need: the applicant's discussion of the background for the proposed project and approach taken demonstrates a clear understanding of the scientific issues, purpose and objectives of this cooperative program. (10%)
 - ii. Objectives: the applicant adequately describes specific objectives of the proposed project which are consistent with the purpose and goals of the cooperative agreement and which are measurable and time-phased. (5%)
 - iii. Technical approach: The applicant's detailed technical approach and methods for conducting the proposed study are adequate to accomplish the objectives. Specific responsibilities of key personnel are identified. (30%)
- b. The plan for tracking and measuring progress toward achieving the expected environmental outputs/outcomes. (5%)

2. Qualifications of the proposed key personnel and adequacy of time commitment. (25%)

3. Institutional capability including laboratory space and equipment that will be available to complete the project. (10%)

4. Quality Management Plan that describes the organization's quality system. (5%)

Programmatic Evaluation Criterion (10%)

The applicant's demonstration of the programmatic capability to successfully carry out the proposed project taking into account such factors as its: (i) past performance in successfully completing federally or non-federally funded assistance agreements of similar size, scope and relevance to the proposed project during the past five years, (ii) history of meeting reporting requirements on prior or current assistance agreements (during the past five years) with federal and/or non-federal organizations and submitting acceptable final technical reports, and (iii) past performance in documenting and/or reporting on its progress towards achieving the expected outcomes and outputs (e.g., results) under prior or current assistance agreements (during the past five years) with federal and/or non-federal organizations (and if such progress was not made whether the documentation and/or reports satisfactorily explained why not).

Organizations that have no relevant or available past performance and/or reporting information will be given a neutral rating for those criteria. In evaluating applicants under this criterion the Agency may consider information from other sources including agency files (e.g., the EPA's Grantee Compliance Assistance Initiative Database) and prior/current grantors (e.g., to verify and/or supplement the information provided by the applicant).

Other Factors: When two or more of the highly rated proposals receive equivalent rankings, the respective budgets will be evaluated by EPA staff for cost reasonableness and cost realism in order to determine which applicant will receive the award. The proposal that is determined to be the most reasonable/realistic will be selected for award. The amount of cost sharing proposed (if any) will not result in additional points for any applicant, but will be considered in the evaluation of the reasonableness and realism of the overall budget.

Review and Selection Process:

Evaluation Review Process: The eligibility review discussed in Section III will be conducted by EPA personnel who are not part of the technical review panel. The technical review panel, which reviews the technical proposal for scientific merit and organizational capabilities, shall consist of at least one internal EPA reviewer and at least two non-EPA reviewers who are able to demonstrate technical expertise and a lack of any conflict of interest. The technical review panel will review the proposal against the criteria above identified as Technical Evaluation Criteria and rank the proposal based upon this evaluation. The programmatic review will be conducted by one or more EPA reviewers who are not part of the technical evaluation panel and who are able to demonstrate a lack of any conflict of interest. The programmatic reviewer(s) will review the proposal against the criteria identified as Programmatic Evaluation Criteria above and rank the proposals based upon this evaluation. The results of the Technical and Programmatic Evaluations will be combined to

determine the overall ranking of each evaluated applicant.

Source Selection: EPA will make a selection of the applicant for award based upon the combined rankings of the technical and programmatic reviews and the other factors discussed above. EPA may negotiate changes to the proposal with the selected applicant so long as they do not affect the integrity of the competition. For example, EPA will discuss significant comments received from the technical reviewers, aspects of the budget that may be questionable, the proposed terms and conditions for the agreement, and the nature and extent of EPA collaboration. The Decision Official is an Office of Research and Development (ORD) manager who will determine which applicant should receive the award.

Rejection Factors: Applications may be rejected because they fail to comply with the administrative requirements of the RFA, they are found to lack relevancy, they are judged technically and/or programmatically unacceptable, or they are not deemed suitable for award due to other factors (if identified). EPA reserves the right to reject all proposals or applications and make no awards.

Anticipated Announcement and Award Dates: The anticipated award date is May 1, 2007.

VI. Award Administration Information

Nonprofit Administrative Capability Reviews

Nonprofit applicants that are recommended for funding will be subject to pre-award administrative capability reviews consistent with Sections 8.b, 8.c, and 9.d of EPA Order 5700.8.

Award Notices

Notice of award will be made in writing by an official in the EPA Grants Administration Division. Preliminary selection by the Decision Official in the Office of Research and Development does not guarantee an award will be made. Applicants are cautioned that only a grants officer can bind the Government to the expenditure of funds. No commitment on the part of EPA should be inferred from technical or budgetary discussions with an EPA Program Official. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the EPA Grants Award Official does so at their own risk.

Disputes: Assistance agreement competition-related disputes will be resolved in accordance with the dispute resolution procedures published in 70 FR (Federal Register) 3629, 3630 (January 26, 2005) which can be found at <http://www.epa.gov/ogd/competition/resolution.htm>. Copies of these procedures may also be requested by contacting the Agency contact identified in Section VII.

Administrative and National Policy Requirements

Regulations and OMB Coverage: Grants and agreements with institutions of higher education, hospitals, and other non-profit organizations are subject to 40 CFR Parts 30 and 40 and OMB Circular A-122 for non-profits and A-21 for institutions of higher learning.

Grants and agreements with state, local, and tribal governments are subject to 40 CFR Parts 31 and 40 and OMB Circular A-87.

Programmatic Terms and Conditions: Terms and conditions will be negotiated with the selected recipient covering the following requirements:

1. An acceptable quality assurance document, i.e., Quality Assurance Project Plan (QAPP), shall be due within 45 calendar days of award.
2. To further the assistance-agreement objectives of public support and stimulation, applicants must agree to make methods, models, and data resulting from this agreement accessible to the public.
3. The nature and extent of collaboration between EPA and the recipient.

Reporting

Annual Progress Reports: The selected recipient will be required to submit annual progress reports summarizing technical progress in achieving the environmental outputs and associated outcomes, difficulties encountered, and planned activities for the next year. Each report shall include a summary of expenditures.

Final Report: The selected recipient will be required to submit a final report within 90 calendar days of the completion of the period of performance. One or more peer reviewed journal articles may be substituted for the final report.

VII. Agency Contact

The primary agency contact for this RFA is **Linda Ransick** at:
U. S. EPA, MS-587, 26 West Martin Luther King Dr., Cincinnati, OH 45268
Telephone: (513) 569-7395
E-mail: ransick.linda@epa.gov (applications may not be submitted via email)

If unable to reach Linda Ransick, contact Mr. Walter Stutts at:
Telephone: (513) 569-7487
E-mail: stutts.walter@epa.gov

VIII. Other Information

Questions

Questions should be submitted in writing by November 15, 2006. Do not attempt to seek information regarding this RFA from any source other than those identified in Section VII as the information provided may be erroneous. Questions that are considered significant will be answered via an amendment to this RFA.

Animal and Human Subject Research

Animal Welfare: A grant recipient must agree to comply with the Animal Welfare Act of 1966 (P.L. 89-544), as amended, 7 U.S.C. 2131-2156. The recipient must also agree to abide by the “U.S. Government Principles for the Utilization and Care of Vertebrate Animals used in Testing, Research, and Training.” [50 Federal Register 20864-20865 (May 20, 1985)]

Human Subjects: A grant recipient must agree to meet all EPA requirements for studies using human subjects prior to implementing any work with these subjects. These requirements are given in 40 C.F.R. 26. For observational studies involving children and/or pregnant women, please refer to Subparts B & D of 40 C.F.R. 26. No work involving human subjects, including recruiting, may be initiated before the EPA has received a copy of the applicant’s Institutional Review Board’s (IRB) approval of the project and the EPA has also provided approval. Where human subjects are involved in the research, the recipient must provide evidence of subsequent IRB reviews, including amendments or minor changes of protocol, as part of annual reports

DUNS Number

Grant applicants are required to provide a Dun and Bradstreet (D&B) Data Universal Numbering System (DUNS) number when applying for Federal grants or cooperative agreements. OMB has determined that there is a need for improved statistical reporting of Federal grants and cooperative agreements. Use of the DUNS number government-wide will provide a means to identify entities receiving those awards and their business relationships. The identifier will be used for tracking purposes, and to validate address and point of contact information.

A DUNS number will be required whether an applicant is submitting a printed application or using the government-wide electronic portal (Grants.gov). The DUNS number will supplement other identifiers required by statute or regulation, such as tax identification numbers. Organizations can receive a DUNS number in one day, at no cost, by calling the dedicated toll-free DUNS Number request line at 1-866-705- 5711. Individuals who would personally receive a grant or cooperative agreement award from the Federal government apart from any business or non-profit organization they may operate are exempt from this requirement. The website where an organization can obtain a DUNS number is: <http://www.dnb.com>. This takes 30 business days and there is no cost unless the organization requests expedited (1-day) processing, which includes a fee of \$40.